

cases in which the complement fixation test fails, then it will be of great value. It also seems to have some value in a negative way, that is, so far it has not given well marked reactions in non-syphilitic cases. In the early and secondary phases of lues it does not seem to give consistent results; but in these stages further diagnostic assistance is not needed as much as in tertiary and latent tertiary cases and in the so-called parasyphilitic conditions. The results of this investigation so far are sufficiently encouraging to warrant continuing the work and during the year clinical investigators in various parts of the country will carry it on. More work will be pursued in the direction of determining the possible value of the test in tabes, general paralysis and other parasyphilitic states. Before the value of luetin can be definitely placed very many more control tests will have to be made.

Through the kindness of Noguchi some luetin and some "control emulsion" have been sent to the Stanford University Medical Department and the writer has been using the same in the skin clinic. The procedure is as follows: One-tenth of a cubic centimeter of a diluted suspension of pure culture of the *treponema pallidum*, killed by heat ("luetin"), is slowly injected intradermally. At the same time a corresponding amount of the uninoculated culture medium is injected elsewhere as a control. Clear cut positive reactions, as observed by the writer, may be described as follows: At the site of the luetin injection within a day or two there appears a small inflammatory spot which becomes indurated. The induration and redness increase during the first few days until the lesion appears as a deeply seated indurated nodule involving the entire thickness of the skin. Seldom does it declare itself fully before the third day. When fully developed, the nodule may be from the size of a small pea to two or three times that size, and distinctly inflammatory in character. Inflammation and induration are essential features. At times the reaction appears very early and occasionally it is delayed. It gradually subsides in the course of the following two weeks and disappears, often leaving a small pigmented spot. There are variations from this picture and sometimes the inflammatory nodule is surrounded for a short distance by a definite red zone. The control injection usually shows some redness which occasionally is rather marked, but it is not as pronounced as that seen in the luetin reaction. It subsides earlier and at a more rapid rate than the latter. After observing the two for a number of days there is no difficulty in distinguishing the one from the other.

It is the belief of those who have been carrying out this test that it may prove to be of real value in those cases where aid in diagnosis is so often needed, namely, tertiary syphilis and parasyphilis.

HARRY E. ALDERSON.

SPECIAL REPORT ON POLIOMYELITIS

EPIDEMIC POLIOMYELITIS IN LOS ANGELES.

By THOS. J. ORBISON, M. D., Los Angeles.

In the week ending Saturday, June 15th, one case of poliomyelitis was reported to the Health Office of Los Angeles. In the next seven days, seven new cases were reported. Eleven cases were reported in the seven days following. The next two weeks totaled thirty-four and twenty-five new cases, respectively. Practically all of these cases were reported from the southeastern section of the city, and were grouped, roughly, along both sides of the river bed. It transpired that in a certain adjacent extra-urban district there were several cases of poliomyelitis, and it was reasonable to suppose that it had spread to Los Angeles along the lines of human travel. Also, it was fairly well confined to the district of the city where many of the city streets had never been watered, and where the hygienic conditions of the inhabitants were bad.

Thus, it was apparent that an epidemic of poliomyelitis was in progress. Realizing that the duration of any epidemic that flourishes in the dry and dusty months, when refuse and decaying vegetable and animal matter, and other filth, is exposed longest and in greatest amounts, when various suspected carriers were most prevalent, the Health Commissioner of Los Angeles, Dr. L. M. Powers, stated the situation to Acting Mayor Williams. The Mayor, at Dr. Powers' request, called a meeting of physicians, clergymen, laymen, and women, on the evening of Friday, July 19th. The whole subject was discussed. The chief result of this meeting was that a committee was appointed by Acting Mayor Williams to act as an advisory board with the Health Commissioner. Its functions were to obtain all necessary data, advise with the Health Commissioner on one hand, and Councils on the other.

This committee organized itself into working units directly after the adjournment of the first general meeting. Its first business meeting was July 27th. The chairman, Dr. H. G. Brainerd, appointed two sub-committees—(1) a hospital committee and (2) publicity committee. The first was to take steps to equip a suitable hospital to care for the cases that could not be cared for properly at home. The members of this important and efficient committee were Drs. W. LeMoyne Wills, Cas. B. Nichols, and Rev. R. L. Windsor. They viewed various sites, and selected a suitable one on a hillside, not remote from the center of the city, but entirely isolated. The building must

be remodeled, renovated, painted, screened, and entirely furnished, as it was not serviceable in its present condition. To effect such a reorganization there were no funds. The central committee met with Mayor Alexander and the Council August 3rd, to state the needs of the situation. Four things were asked: (1) A twenty-four-hour quarantine; (2) Funds to equip the hospital; (3) An auto ambulance; (4) Sprinkling or oiling of all streets.

These requests were granted, and the Council pledged itself to back up the committee with funds and moral support. With this assurance the Hospital Committee at once took measures to establish a completely equipped, modern hospital, from the chaotic materials at hand. It is sufficient to say that between August 3rd and August 12th this was done, and the first case admitted into a smoothly-running hospital, where efficient nurses were prepared to receive and care for infected cases. Up to August 29th there have been seven cases admitted.

The Publicity Committee was appointed by the chairman to meet the panicky state of mind of the community, with prepared statements of advice as to what the disease really was, how best to institute prophylactic measures, and how to aid the Health Commissioner in his campaign. The newspapers, with two exceptions, offered their columns for the committee's use. This action was of the greatest help in allaying the panic that was increasing rapidly. The thanks of the community are due the *Record*, *Herald*, *Times*, and *Examiner* for their great help in giving instruction to the people and the truth as to the real facts.

The members of the Publicity Committee were Rev. R. L. Windsor (in whose parish a large percentage of the cases were), Drs. Wills, Jeters and Orbison. Dr. Jeters is an osteopath, who volunteered his services and who has done efficient service.

The twenty-four-hours' quarantine went into effect August 6th, also the additional sprinkling of streets, and care as to garbage and refuse. From the recorded figures (vide tables appended), it would seem that the quarantine measures, together with the street sprinkling, and more rigidly enforced hygiene, have been responsible for the sudden decrease in the number of new cases.

As to the quarantine, it was a rigid day and night isolation of all infected houses and their inmates during a period of thirty days from the date of the beginning of the illness. The regulations provided that the wage earner should either remain in quarantine with other members of the household, or be allowed to remain outside during the period; but that he or she should not go in or out at will. To effect an enforcement of the regulations, a day guard and night guard were placed before the infected houses and the placard, "Polio-myelitis (Infantile Paralysis)," was tacked up in

a conspicuous place. Another prophylactic measure affecting the public that was recommended, was the closing of Sunday-schools, playgrounds, picnics, picture shows, etc., to children under fifteen years of age.

Of course, it is too early to make any satisfactory tabulations, as the epidemic may be only in abeyance.

The following tables were compiled by the Health Office, up to and including the week ending August 24th:

Record of cases and deaths. Week ending June 15, 1912, 1 case, 1 death; June 22, 7 cases, 1 death; June 29, 11 cases, 2 deaths; July 6, 34 cases, 6 deaths; July 13, 25 cases, 5 deaths; July 20, 29 cases, 3 deaths; July 27, 41 cases, 8 deaths; August 3, 29 cases, 6 deaths; August 10, 27 cases, 9 deaths; August 17, 21 cases, 2 deaths; August 24, 12 cases, 2 deaths. Total, 237 cases, 45 deaths.

Record by ages. Under 1 year, 22 cases, 6 deaths; 1 to 2, 49 cases, 8 deaths; 2 to 3, 48 cases, 6 deaths; 3 to 4, 28 cases, 4 deaths; 4 to 5, 22 cases, 8 deaths; 5 to 10, 33 cases, 8 deaths; 10 to 15, 14 cases, 4 deaths; 15 to 20, 5 cases, 1 death; 20 to 25, 1 case; 25 to 30, 1 case; 30 to 35, 2 cases; 35 to 40, 1 case; 40 to 45, 1 case; 45 to 50, 1 case; age not recorded, 9 cases.

Record by sex. Cases, male 126, female 107; not recorded 4; deaths, male 29, female 16.

Quarantine, as in diphtheria, without guards, was instituted with the first case, but since August 6th strict isolation with guards day and night, as in smallpox, has been maintained.

A municipal hospital was opened August 12th; and, on August 17th, 4 cases had been received. Patients are recommended for admission for protection of other members of the family, or neighboring families, when strict isolation is difficult.

Cases reported by week:

Week ended	June 15	1
" "	" 22	7
" "	" 29	11
" "	July 6	34
" "	" 13	25
" "	" 20	29
" "	" 27	41
" "	Aug. 3	29
" "	" 10	27
" "	" 17	21
" "	" 24	12
To Aug. 27th inc.		2

Released from Quarantine:

Week ended	June 15	0
" "	" 22	1
" "	" 29	3
" "	July 6	12
" "	" 13	14
" "	" 20	3
" "	" 27	25
" "	Aug. 3	26
" "	" 10	27
" "	" 17	37
" "	" 24	33
To Aug. 27th inc.		7

Cases in Quarantine by weeks:

Week ended	June 15	1
" "	" 22	7
" "	" 29	15
" "	July 6	36
" "	" 13	48
" "	" 20	104
" "	" 27	90
" "	Aug. 3	93
" "	" 10	93
" "	" 17	77
" "	" 24	56
To Aug. 27th inc.		51